Process Modeling with IBM Blueworks Live

(Course code: ZB026)

Student Notebook

ERC 1.0

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Introduction

Course Overview

The Process Modeling with Blueworks Live course teaches the basics of process modeling. Concepts are presented in a systematic way, building upon each other to facilitate a good understanding of process modeling.

We begin by creating a descriptive model of the process. This starts with mapping the expected process flow, or happy path, which includes the identification and capture of the process milestones, activities, the participants in those activities, and the normal order in which activities are performed.

We move to a more detailed model to allow for analyzing the process performance and capturing business and functional requirements. This effort includes adding process decision flow.

Hands-on exercises demonstrate the application of these concepts in a real life process scenario. The inclusion of practical tips and techniques further enhance the learning process.

The key take-away is knowing how to create process models that stand on their own - models that are clear and complete from the diagram alone.

COURSE GOAL

Model a business process using IBM Blueworks Live

COURSE OBJECTIVES

After completing this course, you should be able to:

- Perform process discovery mapping and detail capture in IBM Blueworks Live
- Capture key business data requirements in the context of the process participant interactions
- Create a process diagram using IBM Blueworks Live
- Control the process flow using Gateways in IBM Blueworks Live
- Validate the process model meets all business and functional requirements and is ready for implementation

COURSE MATERIALS

The materials created for this course are supplements for training, including lecture, and class activities:

- Student Notebook
- Class Activity and Individual Exercise Environments
    - IBM Blueworks Live

TECHNICAL SUPPORT

IBM BPM Blueworks Live

- Process Mapping 101 Self-Paced Online Course
- Performance Support Tutorials - Blueworks Live Help System
- Product Blog
- User/Developer Forums

OTHER RESOURCES

- Business Process Modeling Notation Specification 1.2
- Email Questions about training, upcoming courses, or course materials to lombardi_education@us.ibm.com
- Technical questions can be directed to Support by visiting http://www-947.ibm.com/support/entry/portal/

Unit 1: The Foundation for Process Modeling

Organizations seeking to improve their business processes will turn to Business Process Management (BPM) to provide a systematic approach to accomplish this improvement. BPM initiatives gain momentum from early adoption to designation of first critical or first launch projects.

Regardless of the project, big or small, it all begins with a Process Model. A clear model that communicates the process and where improvements can be achieved is the key to maintaining the initial executive level momentum. A good Process Model thus aligns the interest of the business and the execution of the IT groups.

Objectives

The objectives for this section are to:

- Describe Business Process Management (BPM)
- List the components of a BPM project
- List and describe BPM Project Team members
- List and describe the Process Modeling phases
- Describe how IBM Blueworks Live fits in Process Modeling

Topics

This section includes the following topics:

- Business Process Management
- Process modeling
- IBM Blueworks Live
- A Process Narrative: The Hiring Requisition Project

Business Process Management

Business Process Management (BPM) is described in a variety of ways by many different sources, but the common themes throughout are the goal, the system, and the expected results.

- The BPM goal is efficient business processes with visibility.
- The BPM system is the management of people-to-people work steps, system-to-system communications, or person-to-system interactions.
- The BPM expected result is process improvement. Business process improvement brings about multiple benefits to an organization.

BPM Vision

Does BPM have or even require a vision? If the ideal were to match the proper toolset with the stated goal, system, and expected result, then the vision might be limited to the execution of a process application build. This would also impact what a Process Model might look like and what it would communicate to a process application development team.

What if a broader vision for BPM were the following:

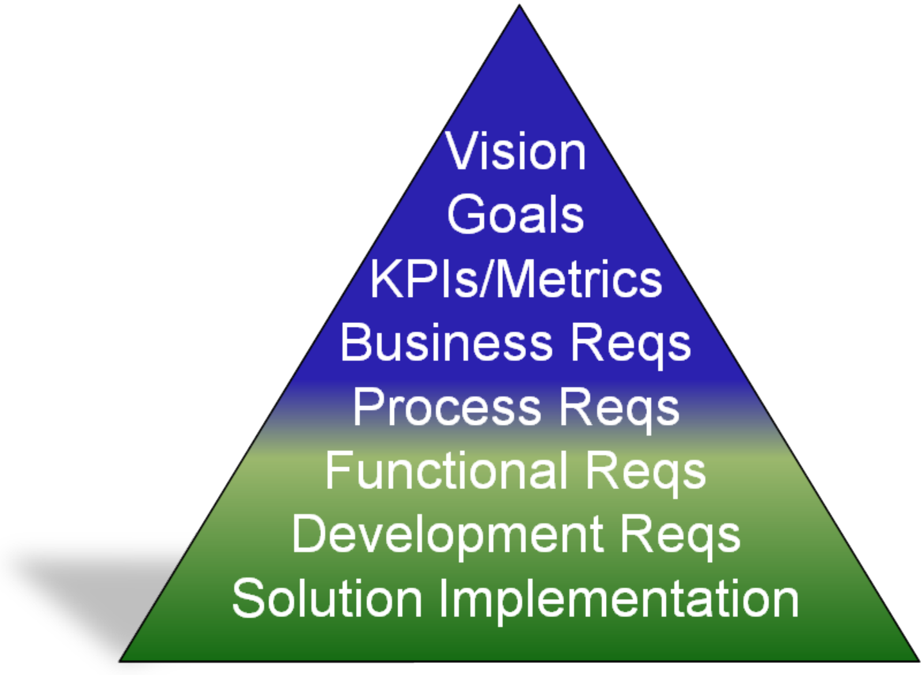
"BPM is the means by which companies and governments improve their operations by leveraging internal business expertise in new, scalable ways. This is achieved by directly engaging business people in the design, definition and creation of enterprise-class process applications."

NOTES

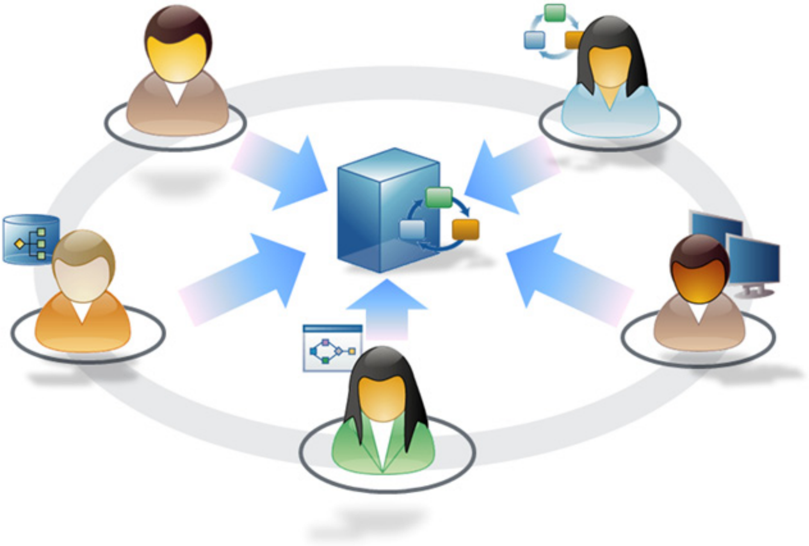
The BPM Project

Project lifecycles for any IT initiative are typically reinforced by well established standards and methodologies. A BPM project, especially one that includes the broader vision and definitions provided, would not fit the typical project lifecycle because the key BPM project components are slightly different.

BPM Project Components



The top-down diagram view of the BPM components provides a quick view of how a typical BPM project lifecycle will evolve. Any of these components missing from a project would interrupt the effective design, definition, and creation of the process application, and perhaps curtail the engagement of business people.



BPM Project Team Members

The unique lifecycle and components of a BPM project require a specific set of project roles, including:

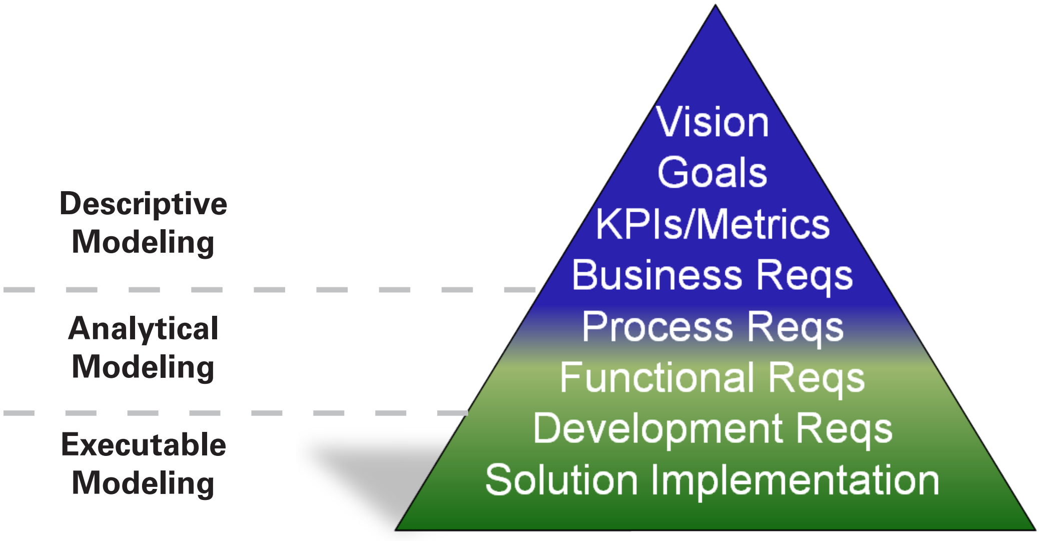
- **Process Sponsor -** Responsible for establishing the project goals and scope, securing organizational support and resources, and ensuring alignment with organizational business goals
- **Process Owner** - Person who knows everything about the process
- **Program Manager/Project Lead** - Person responsible for the project's success
- **Subject Matter Experts** - Those with knowledge of specific process resources, or systems
- **Core BPM Project Development Team** - Business Process Management (BPM) development teams typically include a BPM Analyst, BPM Developer - Process, BPM Developer - Integrations, and a BPMS Administrator
- **Facilitator** - (Optional) Typically manages the collaboration meetings for a BPM Team.

About Process Modeling

An understanding of a business process is necessary before it can be modeled.

Business Process

A business process is a repeating set of coordinated tasks or activities and transactions used to achieve organizational objectives. Process Modeling captures the ordered sequence of these tasks or activities, the roles performing the activities, conditional branching, and the sequencing of the flow of work between activities along with the supporting information from start to end.



Process Modeling can be described as a three phase approach:

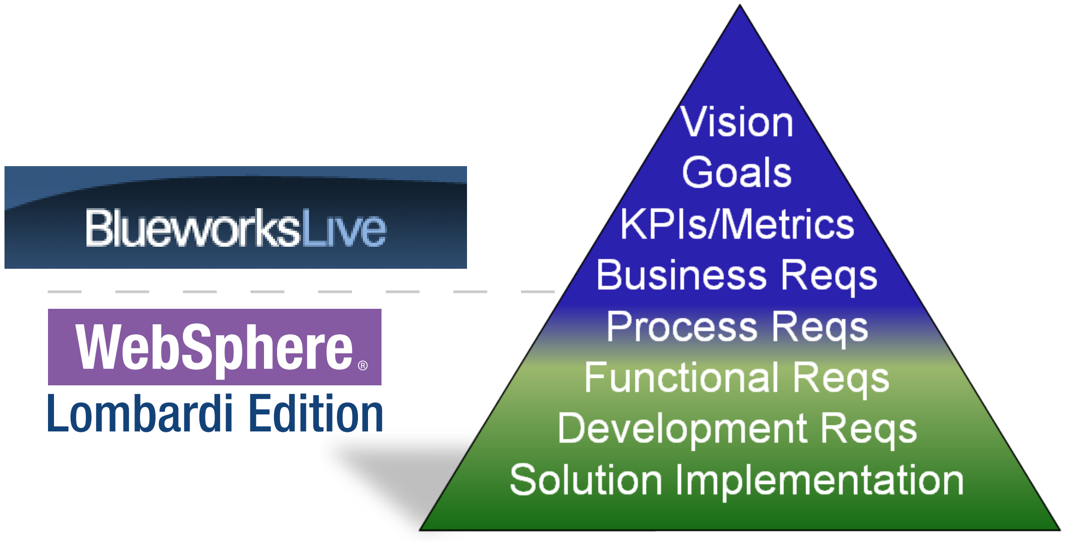
- **Describe the process** - High-level description of the process easily communicated across the organization
- **Analyze/Improve the process** - Analytical, more detailed modeling, showing all pertinent activities and flow including exception paths. Used to create detailed functional requirements for the process
- **Implement the process** - The executable process implementation

IBM Blueworks Live and WebSphere Lombardi Edition

With a vision in place to launch a BPM project, the next task would be to find the right toolset not only to build the process application, but to maintain the project lifecycle synergy between business and IT when it comes to Process Modeling.

How do IBM Blueworks Live and WebSphere Lombardi Edition fit in Process Modeling?

IBM Blueworks Live and WebSphere Lombardi Edition (Lombardi) offer the ability to efficiently handle each component of a BPM project and the three phases of Process Modeling. They also provide built-in functionality to involve business people throughout the modeling phases, whether it is through direct collaboration or effective model validation meetings, called “playbacks”, that are part of the functional charter for both tools.



KEY INFORMATION

- It is very important to note that both tools do not have a clear demarcation where one stops and the other begins in terms of the lifecyle of project. That varies from project to project. However, both work well together to engage business people early and often while still offering sophistication for robust process application implementations.

How do IBM Blueworks Live and WebSphere Lombardi Edition fit in BPM Project Development Methodologies?

While BPM development strategies and methods vary from the standard IT development strategies and methods, some BPM toolsets are more closely aligned with the latter. Blueworks Live and Lombardi incorporate features and functionality that will make support use of unique and effective methodologies that increase development success factors. Here is a quick snapshot of three methods and approaches:

- **Shared Model Approach** - WebSphere Lombardi Edition uses a single shared environment for design and development. All process artifacts are stored in a single shared model architecture.
- **Iterative Approach** - a development method where a process application is created through discreet development sections and repeatedly elaborated until the application reaches maturity. WebSphere Lombardi Edition supports a fully iterative development approach aligned with best practices for BPM development.
- **Playbacks** - the built-in WebSphere Lombardi Edition "playback" functionality encourages IT and Business to collaborate and share feedback on the process application much more frequently during development.

  A playback between business and IT is a focused demonstration of a partially implemented process model with the goal of discussion, consensus bulding, collaborative improvement, and ultimately approval of the model. Playbacks thus enable the iterative development of the process application. Obviously the BPM team will want to reach milestone deliveries in the development of the process application to know when to move on, so Playback 0 through 3 designate the sign-off phases for the development lifecycle.

NOTES

The Hiring Requisition Project

The following process narrative is an example of what a BPM team might develop in collaboration with a process owner. It is provided here as the foundation for the Process Modeling effort needed for the Hiring Requisition Project.

Process Narrative

Core Requirements

A Hiring Manager will submit a hiring requisition to the HR Department containing the following information:

General Details
- Requisition Number
- Date of request
- Requestor
- Date Position Available

Position Details
- Job Title
- Job Description
- Job Level (from company database)
- Number of direct reports (only display if the job level requested is Technical Lead or above)

Department Details
- Division (from company database)
- Department (from company database)

Compensation Details
- Salary to Offer
- Bonus Amount (default to 10% of salary to offer, but in no case shall exceed 50%)

Recruiting Details
- Multiple Employees Needed? (Y/N)
- Number of Employees Needed (only display if multiple employees are needed)
- New Position? (Y/N)

Hiring Manager Comments

Core Requirements

2.1 If the answer to "New Position" is YES, the request shall be forwarded to the appropriate General Manager based on the values specified under Division. Once the General Manager receives the request, they will indicate approval or disapproval.

2.2 If the request is not approved, the General Manager should specify a reason and the request is terminated. If the request is approved, a salary compliance check should be performed.

2.3 The Hiring Manger should be notified of the GM's decision before the process is ended.

2.4 An automated check for salary compliance should be performed. If the request meets salary compliance the hiring request should be automatically posted to the HR Positions database and made available for dissemination.

2.5 When a request violates the company's established salary guidelines, the HR Administrator can approve or reject the requested salary override.

2.6 If the requested salary is approved, the request should be posted to the HR Positions database and made available for dissemination.

2.7 If the HR Administrator rejects the requested salary they must provide comments regarding the violation, add a proposed salary, and send the request back to the originator for resubmission or cancellation.

2.8 The HR Administrator has 4 hours to complete the review. If the review is not completed within 4 hours, the task priority shall be changed to Urgent and an email shall be sent to the HR Administrator notifying them of the missed deadline.

2.9 When the Hiring Manager gets the request back because of a rejection, they have the option to attempt to negotiate an adjusted salary or they can cancel the request.

2.10 All hiring requests must be added to the HR Positions database regardless of the disposition.

2.11 This process can be started from hiring requests received from external Hiring Manager resources.

Challenge Requirements

Hiring Request

3.1 The Hiring Manager must complete all information on the Hiring Request form. Please do not display the form with any excess required field styling. Validation should be transparent to the end user.

3.2 In the General Details section, add the following automatic functions:

- Requisition Number (Auto-generated)
- Date of request (Automatic date/time stamp)
- Requestor (Automatic user name stamp)

3.3 If the answer to New Position is NO, the following information must be provided:

Who is being replaced?

- Name
- Status (drop down - Full Time, Part-Time, Contractor, Temp)
- Manager
- Job Level
- Pay Type (drop down – Hourly, Salary)
- Notes

This information should only be displayed if the answer to New Position is NO.

HR Administrator Salary Override Review

3.4 The HR Administrator should be able to retrieve a list of current positions in the Positions database that match the current request. This will provide the HR Administrator with a salary comparison. This is optional and by request of the HR Administrator, it should not automatically appear. The list of Positions should appear in a pop-up window.

3.5 If the HR Administrator does not complete the review within 8 business hours, the review should be reassigned to another HR Administrator.

Salary Negotiation

4.1 If the salary to offer is changed by the HR Administrator, the original salary offer must be preserved. Additionally, the name of the HR Administrator who made the change should appear next to each proposed salary change. Each time a new salary is proposed, this list should be updated.

4.2 The HR Administrator or the Hiring Manager should be able to select from this list if they want to revert to a previously suggested salary. Selecting from this list should populate the "Salary to Offer" field.

4.3 If the Hiring Manager wants to attempt to renegotiate the salary offer, they should provide a proposed salary and a new override justification.

4.4 Each time the proposed salary, signing bonus, Hiring Manager salary override reason, and HR rejection reason is changed; the original information should be added to lists that are available during the negotiation phase.

4.5 The Signing Bonus must behave the same way.

4.6 A total of three attempts by the Hiring Manager to negotiate a salary override are allowed. After the third attempt to negotiate a salary override, their only option is to cancel the request, or select a previously offered salary from the HR Administrator.

New Position Review

4.7 If the General Manager cannot approve the request for a New Position, the Hiring Manager should indicate whether a Temporary Contract position is acceptable.

4.8 If a temporary position is not acceptable, the request is cancelled.

4.9 If a temporary position is acceptable, the request shall be forwarded to the HR Recruiting department. If the HR Recruiting department can fulfill the request, the GM and Hiring Manager are notified and the request is submitted for salary compliance.

Unit 2: Playback 0 - Process Discovery

When a process has been identified and it is ready for a Business Process Management (BPM) initiative, the first undertaking is to model the process. Process Modeling begins with a descriptive process modeling effort, otherwise known as Process Discovery. Process Discovery encompasses mapping the process, a capture of the process details, and creation of the initial process diagram.

All of this is accomplished during the Playback 0 phase of development. The project team meets with each business stakeholder during this phase, leading up to the final milestone session where sign-off is obtained. This final Playback 0 sign-off should validate that the model accurately reflects the expected process flow, that identified process roles are verified, and that process details and process improvement needs are well documented.

Objectives

After completing this unit, you should be able to:

- Capture process Milestones for a Discovery Map
- Capture process Steps and Activities for a Discovery Map
- Create a sub-process from Discovery Map Activities
- Document process details including process participants and intended process improvements in a Discovery Map
- Create a Conceptual Data Model

Topics

This unit includes the following topics:

- About Process Discovery
- Creating a Discovery Map
- Capturing the Process Details
- When do I move from a Discovery Map to a Process Diagram?

About Process Discovery

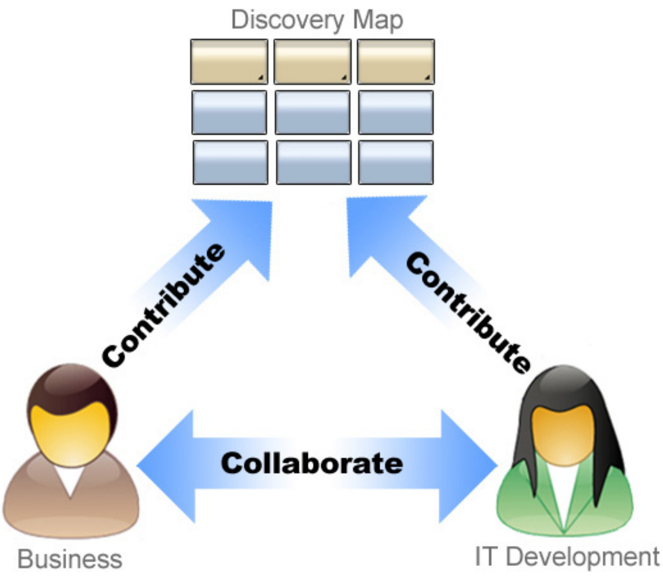
There are two main goals for process discovery, the first of which is highlighted in this unit:

- Communicate the process across all team members and the organization. What is the process? What is not the process?

Collaboration

Process discovery leads to the creation of a Discovery Map and is accomplished through collaboration sessions with process subject matter experts and the process owner. These session provides the information needed to create the initial Discovery Map: a high-level process map diagram that communicates the expected order of process task accomplishments and the process details surrounding these tasks.

Process Discovery



Collaboration (continued)

Once important process details are fully captured, the Discovery Map is shared with the process team to get everyone aligned. It is also shared with the business stakeholders for review, validation, and input. The Discovery Map powerfully communicates very important process information with business process owners, facilitating effective collaboration.

Collaboration does not end when the Discovery Map is converted into a Process Diagram -- it is enhanced. Engaging business stakeholders early on in developing the Process Diagram ensures their interest and understanding throughout the entire process modeling lifecycle.

NOTES

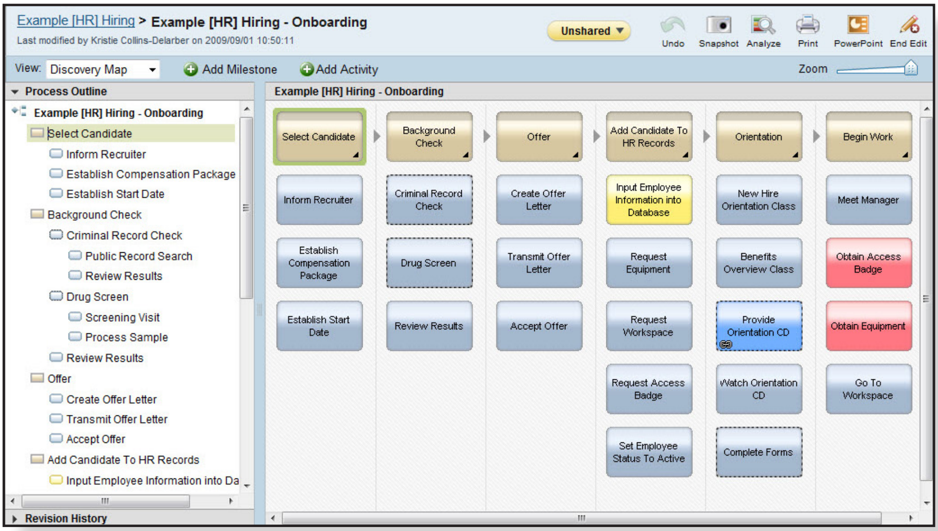
Why IBM Blueworks Live?

IBM Blueworks Live is a software as a service (SaaS) application well suited for descriptive process modeling. Blueworks Live is an easy to use and highly effective way to map, document and diagram a business process. Participant and Contributor tool modes allows for input from BPM team members and Business. You avoid having to maintain multiple files to accomplish the process discovery with Blueworks Live.

IBM Blueworks Live provides:

- A real-time collaborative descriptive process modeling platform
- A business facing process diagramming tool
- Process documentation in a fraction of the time of typical documentation efforts
- A centralized up-to-date version of the process available to many across an organization
- A standard approach to process discovery, documentation and diagramming across an organization

NOTES



Example [HR] Hiring > **Example [HR] Hiring - Onboarding**

Last modified by Kristie Collins-Delarber on 2009/09/01 10:50:11

View: Discovery Map

Process Outline

- **Example [HR] Hiring - Onboarding**
  - Select Candidate
    - Inform Recruiter
    - Establish Compensation Package
    - Establish Start Date
  - Background Check
    - Criminal Record Check
      - Public Record Search
      - Review Results
    - Drug Screen
      - Screening Visit
      - Process Sample
    - Review Results
  - Offer
    - Create Offer Letter
    - Transmit Offer Letter
    - Accept Offer
  - Add Candidate To HR Records
    - Input Employee Information into Da

Example [HR] Hiring - Onboarding

Select Candidate	Background Check	Offer	Add Candidate To HR Records	Orientation	Begin Work
Inform Recruiter	Criminal Record Check	Create Offer Letter	Input Employee Information into Database	New Hire Orientation Class	Meet Manager
Establish Compensation Package	Drug Screen	Transmit Offer Letter	Request Equipment	Benefits Overview Class	Obtain Access Badge
Establish Start Date	Review Results	Accept Offer	Request Workspace	Provide Orientation CD	Obtain Equipment
			Request Access Badge	Watch Orientation CD	Go To Workspace
			Set Employee Status To Active	Complete Forms	

BlueworksLive

NOTES

Creating a Discovery Map

An IBM Blueworks Live Discovery Map is created by focusing on these elements:

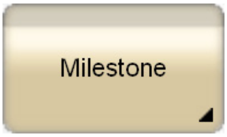
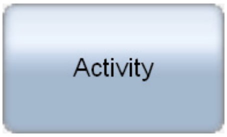
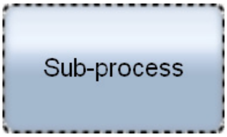
- Milestones
- Activities
- Sub-processes

Each of these elements can be captured during the collaborative process mapping sessions with the process owner and subject matter experts. The elements can also be extracted from a comprehensive process narrative when one is available. It is important to understand when to map each of these elements and how each relates to each other.

NOTES

Discovery Map Elements and BPMN

Creating a Discovery Map is about making sure the expected order of activities in the process is described effectively. This is the reason why Business Process Management Notation (BPMN) standards are limited in terms of use at this point of the modeling effort. Eventually, these elements will become part of a larger set of components in the process model in Blueworks Live and then WebSphere Lombardi Edition.

Discovery Map Element	Description
	Use a Milestone in a Discovery Map to communicate a particular process phase. Milestones are not a BPMN standard, but a very important component in Blueworks Live and Lombardi.
	Use an Activity to communicate a process task accomplished by a single business unit in a Discovery Map. Activity is a BPMN standard.
	Use a Sub-process to communicate an Activity that is executed by multiple business units. Sub-process is a BPMN standard.

NOTES

Milestone

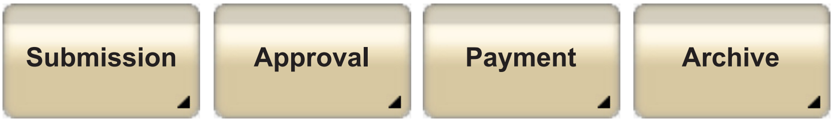
For a Discovery Map, a milestone is used to define a particular process phase, representing a change in state or status of the intended process output. For the entire process, milestones are listed in a sequential manner. Each milestone consist of a group of activities intended to produce a specific deliverable within a given time frame.

Early collaboration or review of a process narrative should yield the process milestones. This is the first task to accomplish to create a Discovery Map.

Expense Reimbursement Process

EXAMPLE

While contributing information for the Discovery Map of an Expense Reimbursement process, the process owner identified the following milestones:



NOTES

GUIDELINES

- Arrange milestones in the order in which they are performed.
- Consider using nouns to label the milestones
- Milestones are process phases; they should indicate the significant subdivisions of the whole process, not each individual step
- Milestones highlight portions of the process that may be good candidates for implementation of process tracking intervals during process implementation, and may provide a useful way to organize discussion of process metrics with process owners and other stakeholders

NOTES

Activity

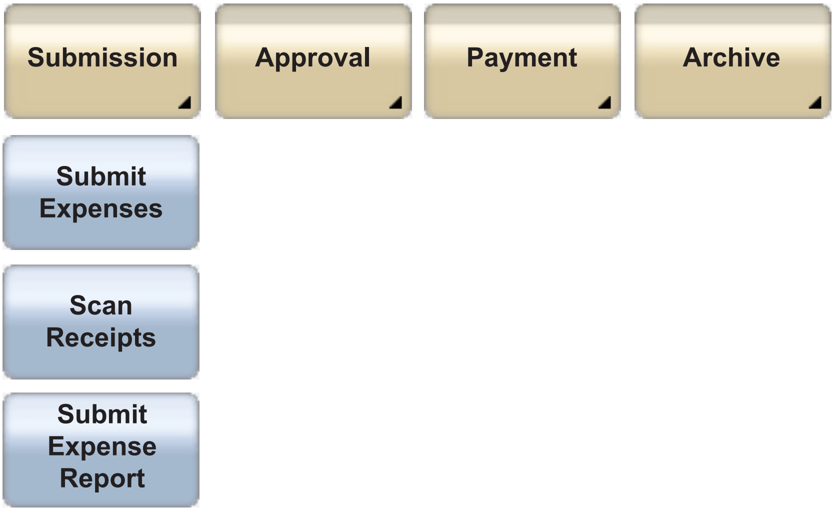
Now that the Discovery Map milestones are in place, it is time to add the associated Activities for each milestone. In process modeling, an Activity represents an atomic unit of work, those things that a responsible party in a process does to complete a task. Collaboration with a process owner or information from a process narrative should yield all the process steps needed to identify all tasks (activities).

Steps

Elaborating the Discovery Map begins with the capture of process steps placed under each milestone.

EXAMPLE

In the example provided below, three steps captured from the *Expense Reimbursement* process information are placed under the first milestone. These are the steps someone would take to submit an expense report.



Each of the three steps is assigned to the same responsible party in the process.

GUIDELINES

- If there is an unusally high number of steps for a given milestone, this may be an indication that more milestones need to be added
- Label steps, tasks, and activities with a verb-noun combination

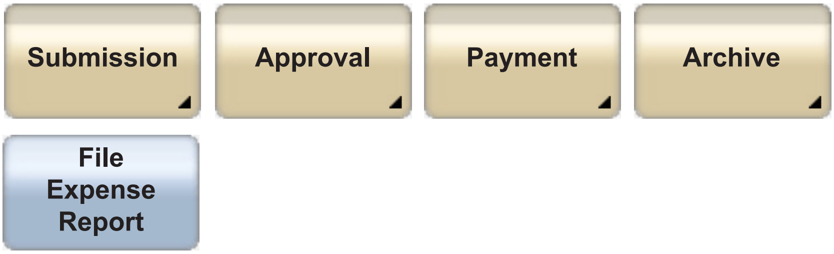
NOTES

Activity (continued)

If there is no change of ownership from one step to the next under a milestone in your Discovery Map, then these steps should be converted to a single task.

EXAMPLE

In the example from the Expense Reimbursement process, the Discovery Map now communicates one atomic unit of work or activity.

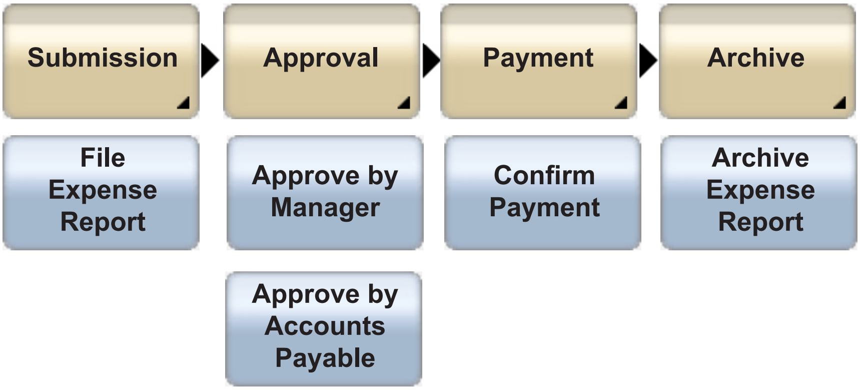


NOTES

Activity (continued)

EXAMPLE

Action such as *Submit* or *Send* to are represented with workflow direction symbols in the Discovery Map.



The initial *Expense Reimbursement* Discovery Map is complete. The goal was to list the Milestones and Activities in a sequential manner following an order of accomplishment. At this stage, the lack of detail such as who and when in the Discovery Map is deliberate. The intent of the process map is to provide visibility into what the business process actually is, without regard to any conditions or exceptions.

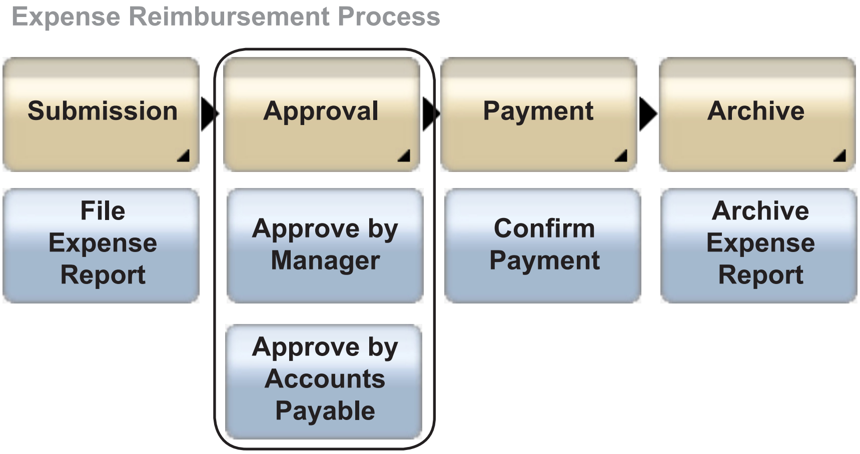
NOTES

Sub-process

An Activity in a Discovery Map can also be communicated as a Sub-process. Sub-processes are tasks that are owned and executed by different business units.

EXAMPLE

The example ***Expense Reimbursement*** process Discovery Map shows a candidate Milestone and set of Tasks that could convert to a single Sub-process.

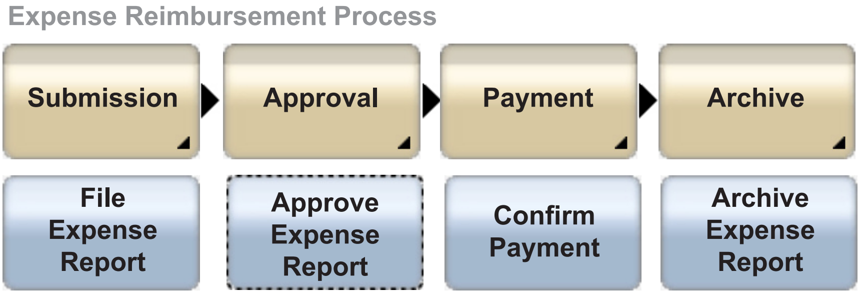


NOTES

Sub-process (continued)

EXAMPLE

The revised Discovery Map with the Sub-process in place.



NOTES

Modifying the Discovery Map

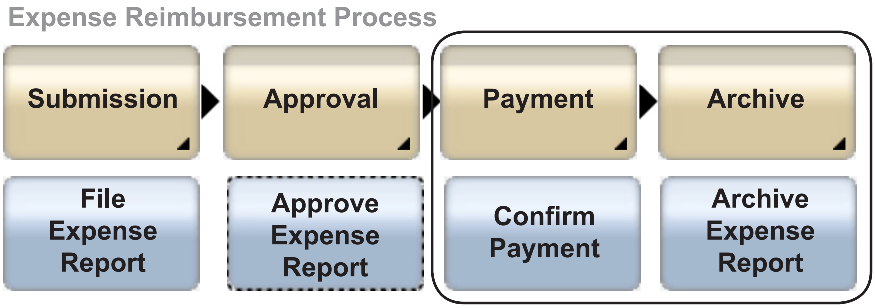
A stated goal of the Discovery Map is to provide visibility into the essential elements of the business process, without regard to any conditions or exceptions. "What is the process? What is not the process?" becomes clearer as the Discovery Map is modified into a concise diagram of the expected path of the process. Opportunities to improve the Discovery Map in this regard include modification of any element, including the Milestones if necessary. The process owner or project team may suggest deleting unnecessary information that hinders the goal of defining the essential elements of the process.

NOTES

Modifying the Discovery Map (continued)

EXAMPLE

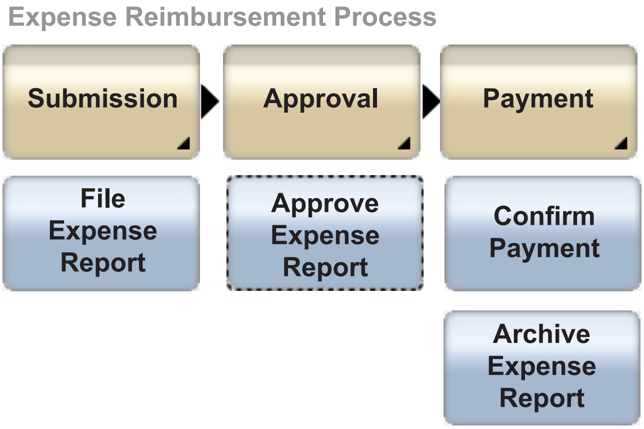
The example Expense Reimbursement process Discovery Map, with a highlighted portion of the map under consideration for modification.



NOTES

Modifying the Discovery Map (continued)

The example Expense Reimbursement process Discovery Map modified to a concise, clear diagram of the process.



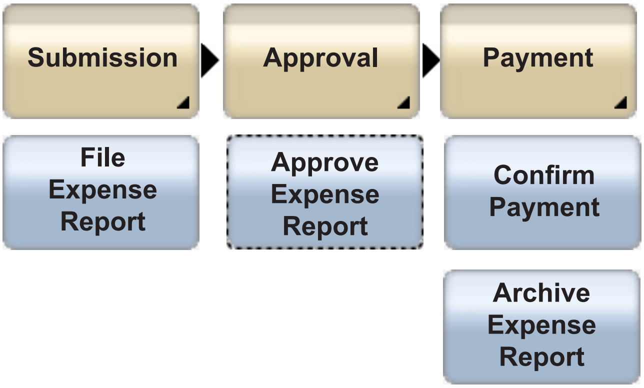
NOTES

GUIDELINES

- For ease of use, use the outline view of the Blueworks Live Discovery Map to edit and modify elements during a real-time collaboration session
- Use the snapshot feature in Blueworks Live to capture and label the initial version of the Discovery Map once you have completed the effort

NOTES

Expense Reimbursement Process Discovery Map



NOTES

Discovery Map Best Practices and Guidelines

- When you create your process in IBM Blueworks Live, provide a simple and clear process name
- Agree on naming conventions for Milestones and Activities across your organization so names mean the same thing to all process team members and key stakeholders
- Arrange Milestones in sequence.
- Use nouns to label the milestones
- Milestones are process phases; they should indicate the significant subdivisions of the whole process, not each individual step
- Milestones highlight portions of the process that may be good candidates for implementation of process tracking intervals during process implementation, and may provide a useful way to organize discussion of process metrics with process owners and other stakeholders
- Start by adding process Steps to the Discovery Map under each appropriate Milestone
- Convert multiple concurrent Steps that are assigned to one owner into a single Task
- If there is an unusally high number of steps for a given milestone, this may be an indication that more milestones need to be added
- Label steps, tasks, and activities with a verb-noun combination
- Process conditions, exceptions, and "who" and "when" details are not the focus of a Discovery Map at this stage of process modeling
- For ease of use, use the outline view of the Blueworks Live Discovery Map to edit and modify elements during a real-time collaboration session
- Use the snapshot feature in Blueworks Live to capture and label the initial version of the Discovery Map once you have completed the effort

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Capturing the Process Details

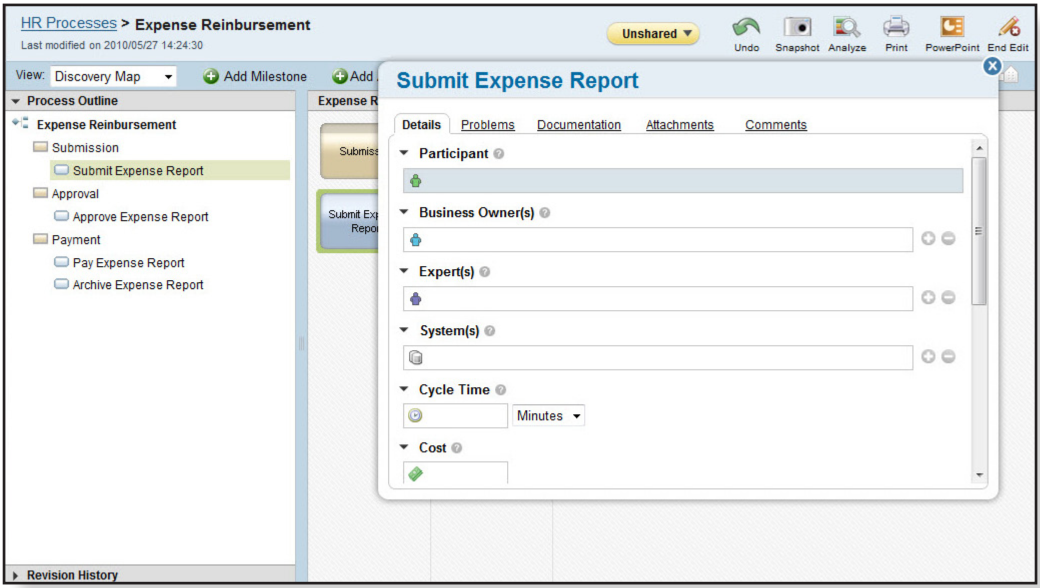
Another facet of Process Discovery is the capture of process details. Thus the focus shifts to:

- Who does what in our process?
- When does a task start and finish?

Capturing process details in the Discovery Map in IBM Blueworks Live allows for the addition of key information about the process task owners, known as Participants, and other process documentation not communicated in the diagram. The first goal of our Discovery Map is to communicate "what is the process?" and adding these details amplifies that effort.

The second goal of a Discovery Map is to reveal problem areas in our process. This is accomplished through a capture of the process problem details in Blueworks Live, including the severity and frequency of each problem. Documenting process problems moves the project from mere process description to a process improvement effort.

NOTES



Example expense reimbursement process details in IBM Blueworks Live

NOTES

Participants

The Discovery Map is now ready for us to identify and capture process task owners, or Participants.

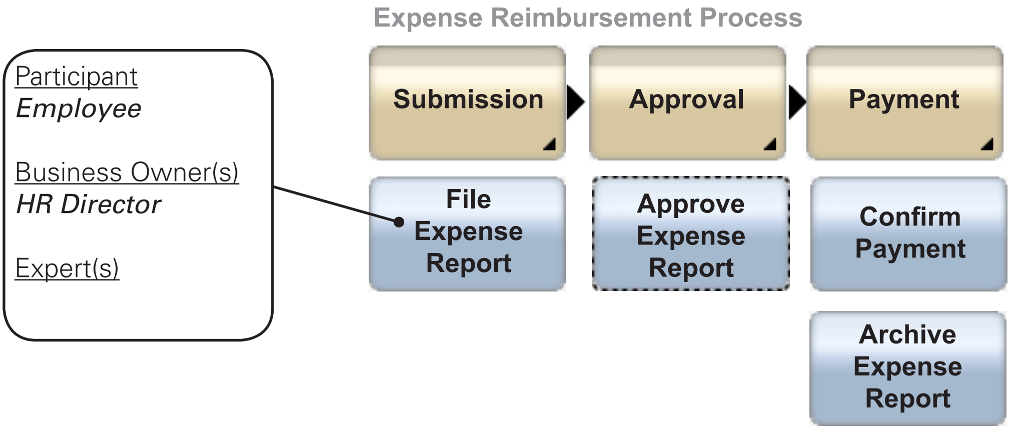
- The Participant provides the ***responsible role*** detail for the Activities in a process. Capturing Participants in the Discovery Map is crucial for creating a Process Diagram later in IBM Blueworks Live and WebSphere Lombardi Edition.

NOTES

Participants (continued)

EXAMPLE

In the example *Expense Reimbursement* process Discovery Map, the Participant identified for the first Activity is *Employee*. Notice that a Participant represents a role and not a particular person. Also, had this process been scoped for used by a specific group or department then the Participant would be different, such as *Salesperson*. In the same manner, if the process has a wider scope in terms of Participants (if, for example, the process includes contract labor and vendors), then the role would probably be an *Expense Submitter*.



GUIDELINES

- Business Owner(s) are the *accountable party* for the process.
- Adding an Expert or Experts to your map details will identify the core subject matter experts that you should *consult* on process details.

Inputs and Outputs

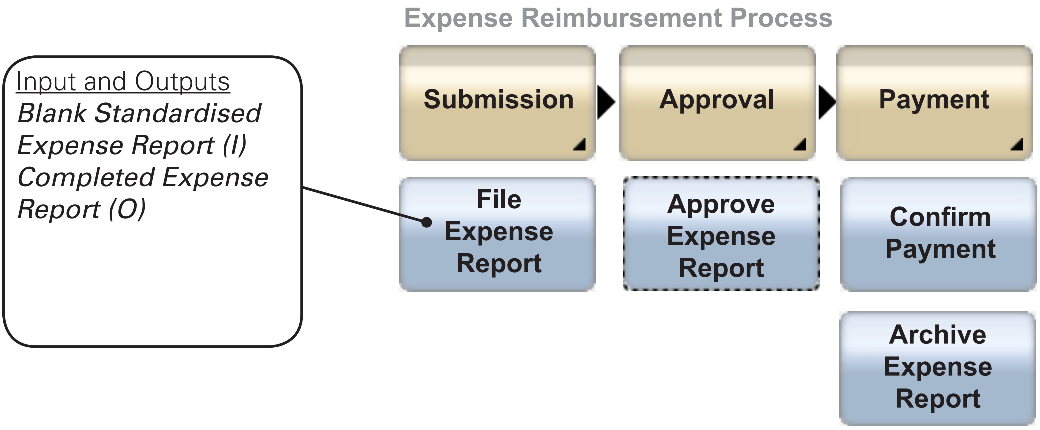
While adding Participants to the Discovery Map helps answer the question “who does what in the process”?, Inputs and Outputs will help answer “when does a Task begin and finish?”. Inputs and Outputs do not pertain to data as much as they deal with process task upstream and downstream details.

NOTES

Inputs and Outputs (continued)

EXAMPLE

The example *Expense Reimbursement* process Discovery Map provides a quick look at input and output details for the first Activity. In this case, the upstream Input for the Task is a "blank standardised expense report", while the downstream output is a "completed expense report". This is the level of information needed for a Discovery Map.



GUIDELINES

- Use the Supplier(s), Input(s), Output(s), and Customer(s) fields in IBM Blueworks Live to describe passive BPMS interactions. Start with supplier inputs and outputs to customers that match an ideal case. **NOTE:** This is not a capture of data inputs and outputs; that information is better served when it is detailed in a Conceptual Data Model.

Problems

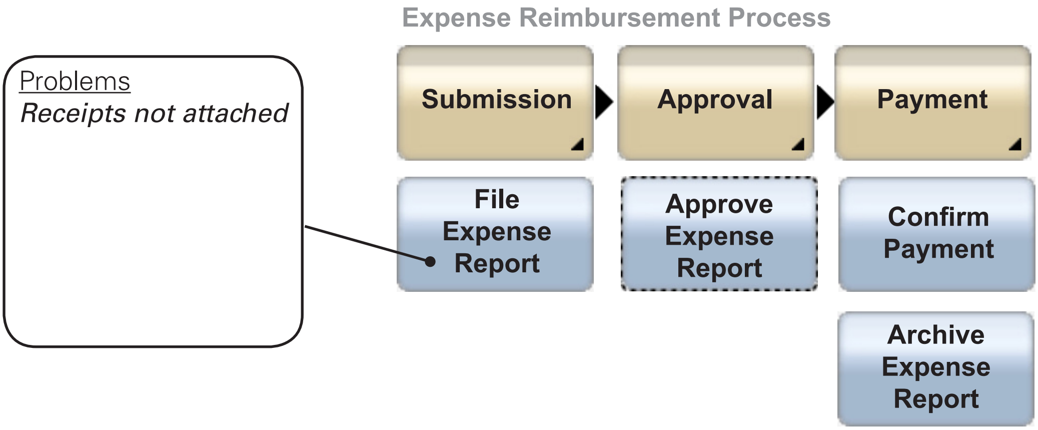
Surfacing process problems is a very important aspect of Process Discovery. It is a Process Discovery goal to document these problems so the project team can easily transition from a descriptive to an analytical process modeling. First, identify and document these Problems in the Discovery Map. The Severity of the Problem should be documented along with the Frequency in order to rank and prioritize each.

NOTES

Problems (continued)

EXAMPLE

The example *Expense Reimbursement* process Discovery Map has an identified Problem that is both Frequent and Severe in the first Activity. "Receipts not attached" is cause for concern because it delays the ability to complete the task and all subsequent tasks in the desired timeframe.



GUIDELINES

- Document Problems when they are mentioned, including severity and frequency if provided. However, avoid investing time to solve these problems at this point in the Discovery effort.

Documentation/Attachments

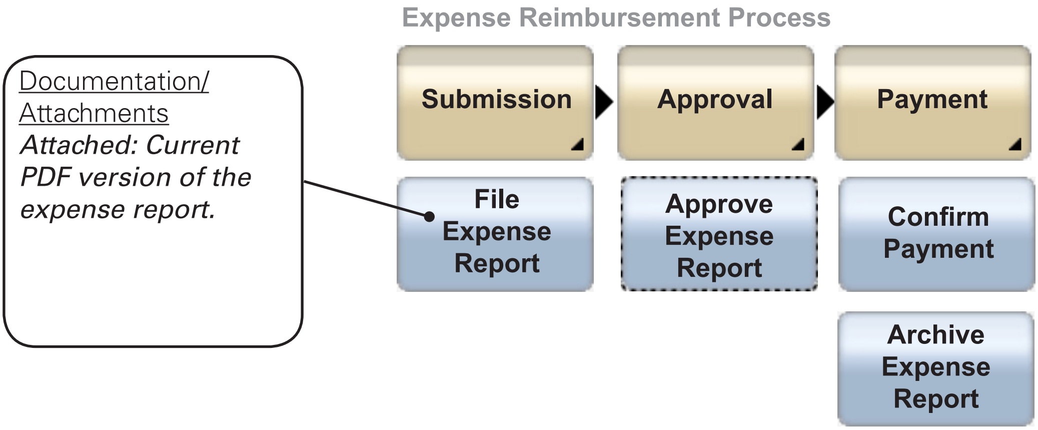
Process details are important for the Discovery Map so even if the information offered by SMEs or stakeholders for a particular Task or Milestone does not fit a category, capturing that information in the Documentation area in Blueworks Live will be valuable for the next phase of process modeling. In the same way, legacy materials and existing process documentation should be included as attachment items.

NOTES

Documentation/Attachments (continued)

EXAMPLE

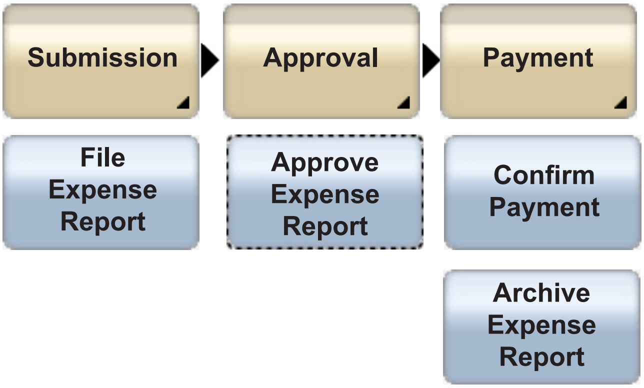
For the example *Expense Reimbursement* process Discovery Map, the BPM Team added an attachment to the first Task so there will be a reference point for actual documents used in the current process. The reference material will be valuable later on during the implementation of the process.



GUIDELINES

- Use the Documentation section to capture the process sponsor vision, improvement targets, and implementation details not yet captured or documented.
- IBM Blueworks Live gives you the ability to communicate details about a process to a wide range of interested parties within your organization. It is up to you what level of detail you use based on how much you want to communicate. If you feel like you're doing needless or redundant data entry and you're not going to share or discover anything new about the process, it is okay to stop adding details to your process.

Expense Reimbursement Process Discovery Map



Details Added (Activities and Milestones)

- Partcipants
- Inputs and Outputs
- Suppliers
- Customers
- Attachments
- Problems (Severity and Frequency)

NOTES

Capturing Process Details Best Practices and Guidelines

- The Participant provides the *responsible role* detail for an Activity in a process. Capturing Participants in the Discovery Map is crucial for creating a Process Diagram later in IBM Blueworks Live and WebSphere Lombardi Edition.
- Business Owner(s) are the *accountable party* for the process.
- Adding an Expert or Experts to your map details will identify the core subject matter experts that you should *consult* on process details.
- The System, Cycle Time and Cost is information you can add to outline both functional and business requirements
- Use the Supplier(s), Input(s), Output(s), and Customer(s) fields in IBM Blueworks Live to describe passive BPMS interactions. Start with supplier inputs and outputs to customers that match an ideal case. **NOTE:** This is not a capture of data inputs and outputs; that information is better served when it is detailed in a Conceptual Data Model.
- Risk and Value Add is information identified in the process analysis phase of modeling.
- Document Problems when they are mentioned, including severity and frequency if provided. However, avoid investing time to solve these problems at this point in the Discovery effort.
- Use the Documentation section to capture the process sponsor vision, improvement targets, and implementation details not yet captured or documented.
- IBM Blueworks Live gives you the ability to communicate details about a process to a wide range of interested parties within your organization. It is up to you what level of detail you use based on how much you want to communicate. If you feel like you're doing needless or redundant data entry and you're not going to share or discover anything new about the process, it is okay to stop adding details to your process.

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When Do I Move from a Discovery Map to a Process Diagram?

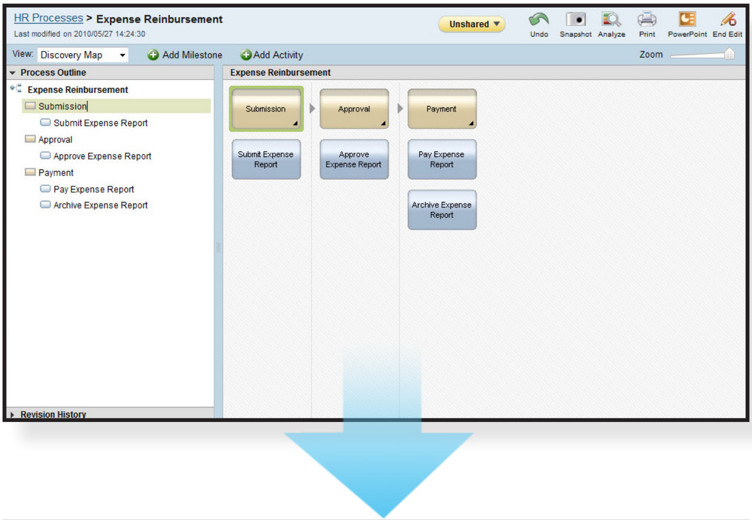
Part of Process Discovery is the creation of a Process Diagram. Up until now, the focus has been the creation of a comprehensive Discovery Map complete with as much process detail as possible. The most common question when in the midst of a Process Discovery effort is:

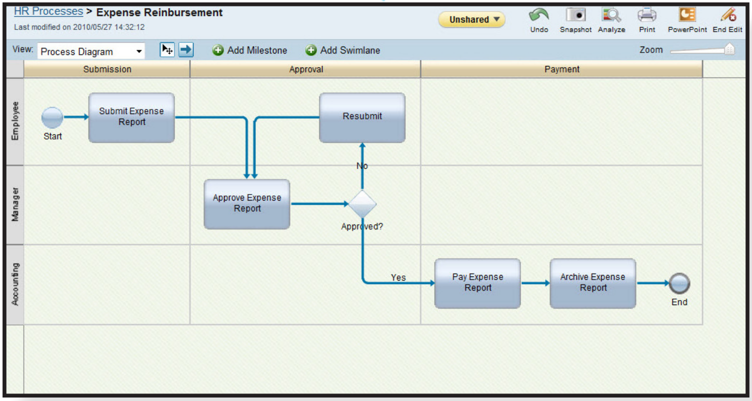
- When do I move from a Discovery Map to a Process Diagram?

Several aspects need to be considered to answer this question. When a Discovery Map has exhausted all requirements to communicate what a process is, complete with documented problems within the process, then it is close to the time to transfer over to a Process Diagram. Another item to consider is the conversations in the process collaboration sessions during Playback 0 meetings. If the questions no longer center around "what does this process do?" and start to center around "what does this process look like?", then the move to the Process Diagram is at hand.

NOTES

Blueworks Live Discovery Map





Blueworks Live Process Diagram

Unit3: Playback 0-Process Diagram

The process Discovery Map has the information in place necessary for stakeholder validation of the high-level process. Up to this point the objectives have been to make sure the process was mapped in its current state, make sure to have all the appropriate process details in place, be precise on the expected order of steps, and capture all process problems.

Now the goal is to create a process diagram to graphically represent the process. The core element flow-chart based notation will be used to further communicate process needs to the BPM team. The diagram allows BPM teams to analyze the process for improvement and to create the functional requirements for process application implementation.

Objectives

After completing this unit, you should be able to:

- Create a process diagram from the Discovery Map in IBM Blueworks Live
- Add a Gateway in Blueworks Live
- List the major components of the WebSphere Lombardi Edition (Lombardi) Authoring Environment

Topics

This unit includes the following topics:

- IBM Blueworks Live Process Diagram
- When Do I Migrate from Blueworks Live to Lombardi?
- About WebSphere Lombardi Edition

IBM Blueworks Live Process Diagram

As described earlier, Process Modeling captures the ordered sequence of activities within a process along with supporting information from start to end. In Modeling, the business process is framed using a workflow model to reflect component activities, the roles performing those activities, conditional branching and the sequencing of the flow of work between activities. In IBM Blueworks Live, this workflow model is called a Process Diagram.

About BPMN

To communicate this model clearly within your organization, a notation standard must be applied. The primary goal of Business Process Management Notation (BPMN) is to provide a notation that is readily understandable by all business users, from the business analysts that create the initial drafts of the processes, to the technical developers responsible for implementing the technology that will perform those processes, and finally, to the business people who will manage and monitor those processes. Thus, BPMN creates a standardized bridge for the gap between the business process design and process implementation. This single notation has been agreed upon among multiple BPM vendors for the benefit of the user community.

Core Elements

Both IBM Blueworks Live and WebSphere Lombardi Edition use six core BPMN 1.2 elements:

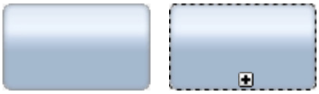
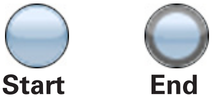
- Activity
- Event
- Gateway
- Flow
- Pool
- Lane

The manner in which each tool uses these six elements varies because the focus of each is different. Blueworks Live's focus is to maintain a very close relationship with Business, while Lombardi is meant to carry the process model through to implementation and then to deployment of the process application. In Lombardi, the BPMN elements have robust constructs not found in Blueworks Live.

Create a Process Diagram in IBM Blueworks Live

To continue the descriptive process modeling in IBM Blueworks Live, a Process Diagram must be created. This is not a new experience or handoff, but an extension of the work already produced in the Discovery Map.

In IBM Blueworks Live, creation of a Process Diagram is a simple matter of one click to convert from the Discovery Map. IBM Blueworks Live automatically does the work for you. The elements created from the Discovery Map retain all the details entered previously. Milestones are translated to process diagram section headers, the Participant details into Lanes, also known as Swimlanes, and the Activities assigned to each Participant fall into the proper Lane for each. Because the expected order of tasks is the focus of the Discovery Map, conversion to a Process Diagram causes a Start and End Event to be automatically assigned with connectors for each task.

Process Diagram Elements	Description
Activity 	An Activity is an atomic unit of work and can be represented as a Task or a Sub-process.
Lane	A Lane is a sub-partition within a process Pool. Pools are not as evident in a Blueworks Live Process Diagram and will be discussed later in Lombardi. Lanes are used to organize and categorize Activities within a Process Diagram.
Event 	An Event is something that “happens” during the course of a business process. EventTypes like Start will indicate where a process starts and End will indicate where a process will end. Another EventType - Intermediate - will be discussed later in the course.

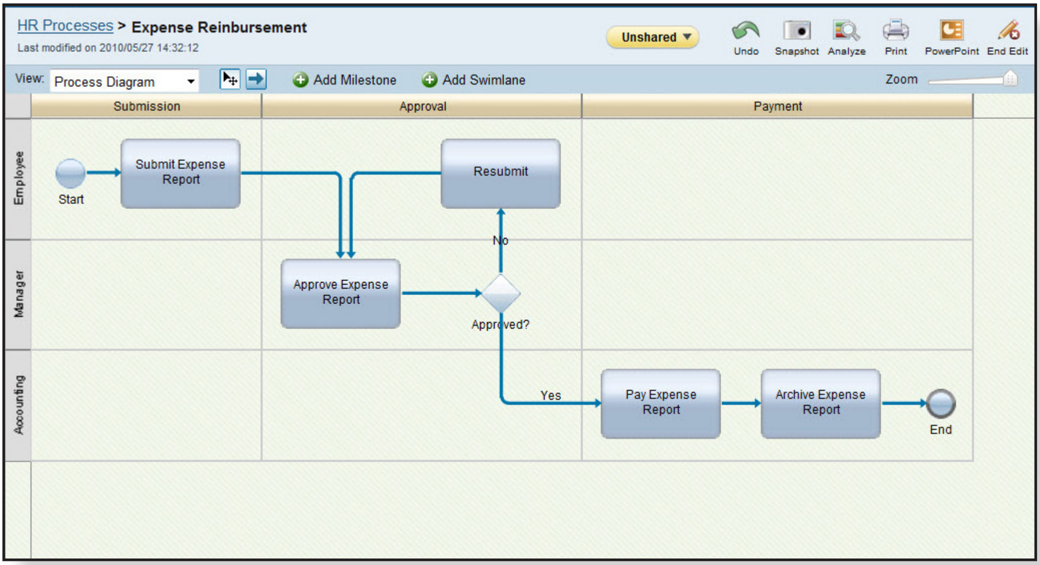
KEY INFORMATION

- Creation of the Process Diagram does not preclude you from continuing to modify the Discovery Map through on-going collaboration sessions. Once you create a Process Diagram, it is linked to the Discovery Map and any revisions are reflected in both areas of the IBM Blueworks Live process.

EXAMPLE

Expense Reimbursement Process Diagram

The example below is an example of a Process Diagram that has been created from an existing Discovery Map and then modified. BPMN elements were added and the diagram was adjusted to articulate the clearest view of the process model to a business audience.



Example modified expense reimbursement process diagram in Blueworks Live

NOTES

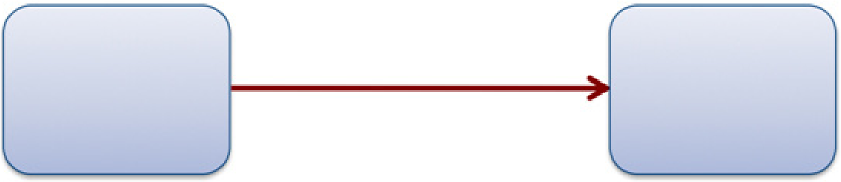
About Process Flow

Process Sequence Flow refers to the flow that originates from a Start Event in your process and continues through activities via alternative and parallel paths until it ends at an End Event.

Normal Sequence Flow

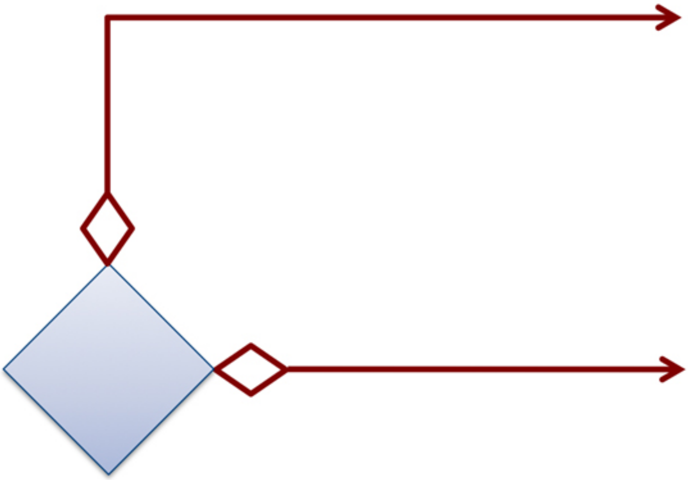
The simplest example of this is a single Sequence Flow connecting two activities.

This is referred to as Normal Sequence Flow.



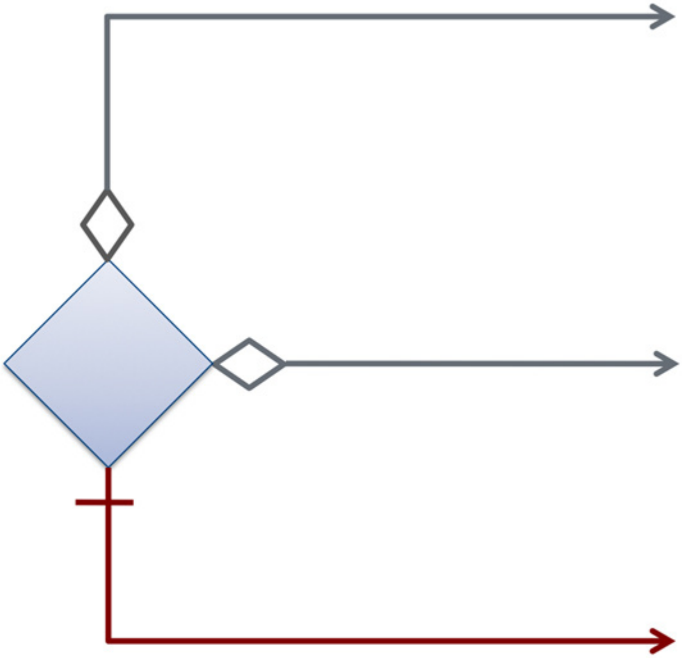
Conditional Sequence Flow

Sequence Flow can have condition expressions that are evaluated at runtime to determine whether or not the flow will be used.



Default Sequence Flow

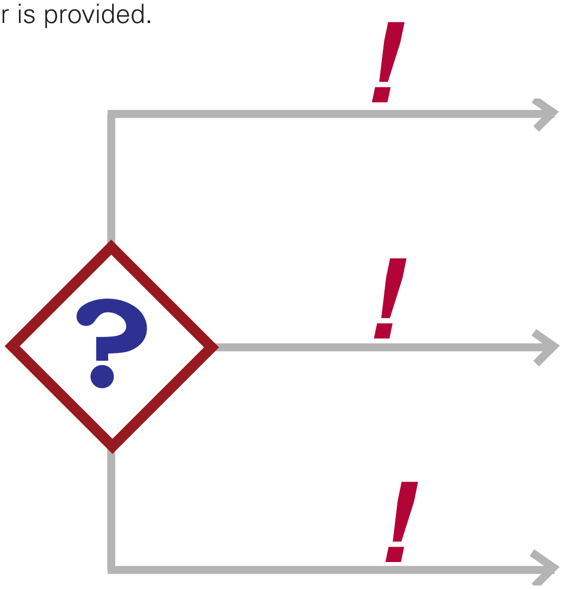
In Lombardi, when using conditional sequence flow, a Default flow is required. This Default flow will be used only if none of the other outgoing flow conditions are true at runtime. These types of Sequence Flow have a slash added to the beginning of the flow line.



About Gateways

A Gateway can be thought of as a question that is asked at a point in the process flow.

The question has a defined set of alternative answers, which in effect act as gates—the process cannot proceed until a valid answer is provided.



A Gateway provides a point where the process may select one, or more, of a number of paths, depending on the type of gateway, and some known condition in the process.

Process Diagram Best Practices and Guidelines

The following is a list of guidelines for IBM Blueworks Live that you can use to accomplish the task of creating and modifying a Process Diagram.

- Each activity you create must reside in a swimlane
- Start activities at the top and work down as new swimlanes are added
- If an activity has an either/or responsible party, create a swimlane that includes both participants
- Decision Gateways should be labeled as a question, with the answers to the question documented on outgoing lines
- Blueworks Live will try to represent the ideal Process Diagram initially, however, it is a good idea to maneuver the elements in this initial diagram until you get an optimal representation of your process
- The use of color for your Activities in the Process Diagram is dependent upon your organization’s need
- Swimlanes in a Process Diagram are the articulation of roles in that process so use naming conventions that describe the role, not the person responsible

NOTES

NOTES

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When do you migrate from Blueworks Live to Lombardi?

IBM Blueworks Live allows modification of the Process Diagram in order to migrate towards analytical process modeling. At some point in the process modeling effort, the decision to move to WebSphere Lombardi Edition needs to be made.

When the questions in the collaboration sessions shift to "how will we improve this process?", you are ready to make the shift towards analytical process modeling and Lombardi. Your modeling effort is now closer to an executable process model with a few modifications and updates left to accomplish. This is when you are engaged in the actual Lombardi implementation.

The first thing you must do is to import the IBM Blueworks Live process diagram into Lombardi.

KEY INFORMATION

- Import of a Blueworks Live Process Diagram to Lombardi does not mean that Blueworks Live has exhausted its value in the project lifecycle. There are still many reasons why Business will want to continue to look towards Blueworks Live as the centralized process modeling communication and documentation.

GUIDELINES

- A process diagram or model is referred to as a Business Process Definition (BPD) in Lombardi
- Any sub-process in your BPD is referred to as a Nested BPD in Lombardi
- In general, a BPD should be as simple an abstraction as you can make it. A highly conceptual BPD will be very resilient to change.
- Make sure you use the Documentation tab in the Properties section in Lombardi to include important requirement notes for each BPD Activity, Decision Gateway, Events and other core elements.

For More Information, Refer To: WebSphere Lombardi Edition-7.1.0-Authoring Environment User Guide>Basic modeling tasks>Creating a BPD

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